

LISTING OF CLAIMS

1. (Currently Amended) An aqueous polymer composition comprising a simple mixture of:
 - a) at least one aqueous asphalt dispersion; and
 - b) at least one aqueous dispersion of at least one polyurethane, said polyurethane being obtained from a polyol component comprising at least one hydroxylated polydiene, said aqueous polyurethane dispersion having previously and separately been prepared according to the following steps:
 - (a) formation of a prepolymer having NCO functional groups by reaction in a solvent of a polyisocyanate component, and a polyol component comprising a diol containing at least one neutralized acid functional group,
 - (b) dispersion of the prepolymer in water,
 - (c) addition of a diamine-type chain extender, and
 - (d) evaporation of the solvent in order to obtain an aqueous polyurethane dispersion containing urea functional groups.
2. (Previously Presented) The composition as claimed in claim 1, characterized in that at said polyol component comprises at least 50% of at least one hydroxytelechelic conjugated-diene oligomer.
3. (Previously Presented) The composition as claimed in claim 2, characterized in that said oligomer is selected from oligomers based on: butadiene, isoprene, chloroprene, 1,3-pentadiene or cyclopentadiene, or on mixtures thereof.
4. (Previously Presented) The composition as claimed claims 2, characterized in that said oligomer has a number-average molecular weight M_n of 500 to 15 000.
5. (Previously Presented) The composition as claimed in claim 2, characterized in that said oligomer has a hydroxyl number expressed in meq/g of 0.5 to 5.
6. (Previously Presented) The composition as claimed in claim 1, characterized in that said diol includes at least one neutralized acid functional group.

7. (Previously Presented) The composition as claimed in claim 6, characterized in that said diol is triethylamine-neutralized dimethylolpropionic acid.
8. (Previously Presented) The composition as claimed in claim 1, characterized in that said polyisocyanate component comprises at least one aliphatic, aromatic or cycloaliphatic polyisocyanate having a functionality of at least two.
9. (Previously Presented) The composition as claimed in claim 1, characterized in that the proportions of the polyisocyanate component and of the polyol component are such that the overall NCO/OH ratio is between 1.5 and 2.5.
10. (Previously Presented) The composition as claimed in claims 1, characterized in that said aqueous polyurethane dispersion is obtained with a chain extender selected from diamines.
11. (Previously Presented) The composition as claimed in claim 1, characterized in that said polyurethane represents from 2 to 50%-by weight relative to the total asphalt + polyurethane weight, the weight being expressed as dry matter.
12. (Cancelled)
13. (Previously Presented) A method comprising blending of:
- at least one aqueous asphalt dispersion and
 - at least one aqueous dispersion of at least one polyurethane prepared according to the following steps:
 - formation of a prepolymer having NCO functional groups by reaction in a solvent of a polyisocyanate component, and a polyol component comprising ~~and of~~ a diol containing at least one neutralized acid functional group,
 - dispersion of the prepolymer in water,
 - addition of a diamine-type chain extender, and

(d) evaporation of the solvent in order to obtain an aqueous polyurethane dispersion containing urea functional groups.

14. (Previously Presented) The method of preparation as claimed in claim 13, characterized in that the weight proportion of the polyurethane dispersion represents from 2 to 75% of the total of asphalt and polyurethane dispersions, the asphalt and polyurethane dispersions having independent solids contents varying within a range from 20 to 60% by weight of each dispersion.

15. (Cancelled).

16. (Cancelled).

17. (Previously Presented) The composition as claimed in claim 1, characterized in that said coating is a protective, sealing or waterproof, soundproofing or damping coat or coating for application for roads, roofing, in buildings or in industry.

18. (Cancelled).

19. (Cancelled).

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (New) A method of production of surface coats, waterproof courses under asphalt road mixes, roofing membranes, asphalt road mixes, slurry seals or cold cast mixes, agglomeration binders, protective coverings for pipes, carpet underlay impregnation and tie layers, soundproofing and damping or insulating coverings, characterized in that it comprises the following steps:

- a) blending of at least one aqueous asphalt dispersion with at least one aqueous dispersion of at least one polyurethane prepared by
 - (i) formation of a prepolymer having NCO functional groups by reaction in a solvent of a polyisocyanate component, and a polyol component comprising a diol containing at least one neutralized acid functional group,

- (ii) dispersion of the prepolymer in water,
 - (iii) addition of a diamine-type chain extender, and
 - (iv) evaporation of the solvent in order to obtain an aqueous polyurethane dispersion containing urea functional groups;
- b) direct application of the blend obtained in step a) to the application object or substrate;
- c) drying/film-forming by simple water evaporation;
- it being optional for steps a), b) and c) to be carried out on the actual site of the application and under the ambient conditions of the application site.
24. (New) Coatings, surface coats, waterproof courses under asphalt road mixes, roofing membranes, asphalt road mixes, slurry seals or cold cast mixes, agglomeration binders, protective coverings for pipes, carpet underlay impregnation and tie layers, soundproofing and damping or insulating coverings obtained by the method as defined in claim 23.
25. (New) The composition of claim 2 characterized in that at least 80% by weight of said polyol component consists of at least one hydroxytelechelic conjugated-diene oligomer
26. (New) The composition of claim 4 wherein said M_n is 1000 to 3000.
27. (New) The composition of claim 5 wherein said hydroxyl number expressed in meq/g is 0.7 to 1.8.